

1 CLAIMS:

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3 1. A locking system for attaching a first workpiece to a second workpiece

4 comprising:

5 an opening in said first workpiece for receiving a screw having a threaded

6 first end, an opposite head end, and a collar having external

7 threads, said collar rotatably affixed about a head of said screw;

8 and

9 complimentary locking threads in said opening in said first workpiece for

10 engaging said collar to said first workpiece at said head such that

11 axial and rotational movement of said screw is restricted when said

12 first workpiece is affixed to said second workpiece by urging and

13 rotating said threaded first end of said screw into said second

14 workpiece.

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16 2. The locking system of claim 1, wherein said head is substantially spherical.

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18 3. The locking system of claim 2 wherein said threaded collar has a concave screw

19 head retaining cavity, said substantially spherical head of said screw adapted to be

20 rotatably secured within said cavity.

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22 4. The system of claim 1 further comprising a wrench having an outer body with

23 outwardly extending blades and an inner rod rotatably extending through an inner

1 passage of said body, said rod having a screw face portion extending beyond a base of
2 said body and adapted to engage said opposite head end of said screw, said blades
3 adapted to engage a slot in a top face of said collar.

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5 5. A fastener system for joining a first workpiece to a second workpiece comprising:

6 a screw having a head and a threaded body section, said head having a top

7 section to facilitate rotation of said screw; and

8 a locking collar having a top surface, a top opening, a bottom opening, a

9 smooth, inner cavity, and a threaded outer wall, said threaded outer wall

10 cooperating with a complimentary threaded inner surface of a collar receiving

11 opening in said first workpiece to releasably secure said collar in said first

12 workpiece when said collar is rotated in said collar receiving opening in a first

13 direction of rotation, said inner cavity adapted to rotatably retain and hold said

14 head of said screw with said head top section exposed through said top opening of

15 said locking collar and said threaded body section of said screw extending

16 outwardly from said bottom opening of said locking collar sufficiently to engage

17 and join said second workpiece when said threaded body section of said screw is

18 rotatably urged against said second workpiece in a second direction of rotation.

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20 6. The fastener system of claim 5 wherein said first and second directions of rotation

21 are the same hand.

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1 7. The fastener system of claim 5 wherein said first and second directions of rotation
2 are opposite hand.

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4 8. A fastener system of claim 5 further comprising a wrench having an outer body
5 with outwardly extending blades, an inner rod rotatably extending through an inner
6 passage of said body, said rod having a face portion extending beyond a base of said
7 body and adapted to engage said top section of said head of said screw, said blades
8 adapted to engage a slot in said top surface of said locking collar.

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